News from the Savannah River National Laboratory

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SRNL TECHNOLOGY NAMED AMONG "WORLD'S BEST"

AIKEN, S.C. – For the third year in a row, a technology developed at the U.S. Department of Energy's Savannah River National Laboratory has been named among the top 25 of the World's Best Technologies for the year. The Smart Latch™ acoustic door latch detector, invented by SRNL's Bob Eakle and built with the help of Charlie Fulghum and Larry Feutral, is one of the featured inventions at the World's Best Technologies for 2007 (WBT07) Showcase in Arlington, Texas, May 15-16.

This is the second time in three years that one of Eakle's inventions has been selected as one of the top 25 technologies in the WBT Showcase. In 2005, the Floating Plasma Screen Mount, which he co-invented with SRNL's Don Pak, was featured.

"SRNL has a long tradition of putting science to work to create practical technology solutions that work," says SRNL Laboratory Director Dr. G. Todd Wright. "That fits my definition of 'best': technologies that provide simple new ways of successfully accomplishing the task at hand."

The Smart Latch™ device is designed to verify that doors are latched properly, providing an alert if a door does not latch. It would be useful anywhere that a properly closed and latched door is needed for security and safety, including offices, industrial facilities, or homes with children or elderly residents. The battery-operated device occupies only one cubic inch of space, meaning that it could be easily incorporated into many lockset designs.

It works by using state-of-the-art neural network technology to acoustically analyze the lock's performance. Following the detector's installation, which would be virtually the same as installing any standard lockset, the device memorizes the precise sound – the acoustic "signature" – of the door closing properly. Once this signature is memorized, the device gives a visual and/or audible alarm if the door remains open for too long or is not properly latched. Existing technologies use simple limit switches which do not actually sense the latching event and can be defeated in various ways.

A patent application has been filed on the Smart Latch™ device. Washington Savannah River Company, the subsidiary of Washington Group International that operates SRNL for DOE, is actively seeking qualified companies to enter into a licensing agreement to manufacture and market the device as a commercial product.

The WBT07 is an international competition showcasing seed-stage technologies and licensing opportunities from top universities, federal laboratories, federal agencies, research institutions, and private companies. Each year, up to 75 exhibitors are selected by a seasoned screening panel of investors and commercialization experts on the basis of having the greatest potential for high growth commercial enterprises. From those 75, the top 25 are selected for special attention.

The event, which is produced in cooperation with The National Association of Seed and Venture Funds and the Federal Laboratory Consortium for Technology Transfer, provides an opportunity for investors to gather information on a variety of technologies with global commercialization potential.

SRNL is the applied research and development laboratory at the U.S. Department of Energy's Savannah River Site, providing practical technology solutions in the areas of energy security, national and homeland security and the environment. Washington Savannah River Company operates SRNL for DOE.

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